

Claims

What is claimed is:

1. A method for attaching a separator to an electrode plate, comprising:

5 a separator arrangement step for arranging a sheet-like separator so as to cover both surfaces of an electrode plate;

a separator bonding step for thermally welding the separator by applying a first heating plate along a to-be-bonded edge of the separator adjacent to the electrode plate,
10 the first heating plate having a width which is so set as to correspond to a width of a bonded portion of the separator;
and

a separator cutting step for cutting off the separator by pressing a second heating plate against substantially a
15 central part of the bonded portion.

2. The method for attaching a separator to an electrode plate according to claim 1,

wherein the separator bonding step and the separator cutting step are performed in combination in one process by
20 use of a single-unit heating plate having a protrusion for cutting the separator, the single-unit heating plate serving as the first and second heating plates in common.

3. The method for attaching a separator to an electrode plate according to claim 1,

25 wherein, at least in the separator bonding step, the

separator is supported, via a cushioning member, at one surface opposite to its first heating plate side surface.

4. The method for attaching a separator to an electrode plate according to claim 1,

5 wherein, in the separator bonding step, a protective sheet is interposed between the first heating plate and the separator.

5. An apparatus for attaching a separator to an electrode plate, comprising:

10 a bonding and cutting member composed of a heating plate having a width which is so set as to correspond to a bonded portion of a separator, the separator being so arranged as to cover both surfaces of an electrode plate, the bonding and cutting member having a protrusion formed in substantially a central part thereof for cutting the bonded portion.

6. The apparatus for attaching a separator to an electrode plate according to claim 5,

15 wherein the bonding and cutting member is constructed by combining a heating plate for cutting having a cutting protrusion with heating plates for bonding arranged on both sides of the heating plate for cutting with an interposed insulating material therebetween, and is provided with heaters for heating the heating plate for cutting and the heating plate for bonding separately.

25 7. An apparatus for attaching a separator to an

electrode plate, comprising:

a heating plate for bonding having a width which is so set as to correspond to a bonded portion of a separator arranged so as to cover both surfaces of an electrode plate;

5 and

a heating plate for cutting that cuts substantially a central part of the bonded portion.

8. The apparatus for attaching a separator to an electrode plate according to claim 5,

10 wherein a cushioning member is arranged on a back-face side of the bonded portion of the separator.

9. The apparatus for attaching a separator to an electrode plate according to claim 7,

15 wherein a protective sheet is interposed between the heating plate for bonding and the separator,

and a device for supplying and taking up the protective sheet is provided.

10. The apparatus for attaching a separator to an electrode plate according to claim 7,

20 wherein a cushioning member is arranged on a back-face side of the bonded portion of the separator.